

Distribution of *Opuntia* spp. in the Southeastern United States

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The Genus *Opuntia* P. Miller (pricklypear) occurs throughout much of the United States and Mexico. Species discussed here belong to the Subgenus *Platyopuntia* Engelm., since they are preferred host of the cactus moth (*Cactoblastis cactorum* Berg.). Most data available on *Opuntia* distribution is only general, or at best, county level data. Thus, early on there was a need for a database that offered GPS (global positioning system) coordinates and other important host information. Additionally, location information was also needed for cultivated *Opuntia* which also host the cactus moth. The Cactus Moth Detection and Monitoring Network (CMDMN) (www.gri.msstate.edu/cactus_moth) was developed to support this need. As of 27 April 2007, information on 18 species of *Opuntia* and *Nopalea* (Syn. *Opuntia cochenillifera* (L.) P. Miller, also a preferred host) was in the CMDMN database represented as 1572 dataforms collected across the southern United States. Of these, 1466 (93%) were positive for the host. There were 1144 (73%) dataforms from the Southeastern United States, of which, 1042 (71%) were positive for the host. These included 203 in Alabama, 121 in Florida, 36 in Georgia, 28 in Louisiana, 589 in Mississippi, 22 in North Carolina, and 43 in South Carolina. In Mississippi, along the cactus moth western leading edge, 149 dataforms from natural populations and 421 dataforms from cultivated populations were collected. This illustrates the importance of mapping cultivated populations in addition to natural populations. Of the 18 species in the database, four species are most likely native to the Southeastern United States, although some native species are cultivated. As of 1 May 2007, information was available on the following native species in the database. *Opuntia humifusa* (Raf.) Raf. was found from Mississippi to North Carolina with 252 populations (mostly wild). *Opuntia pusilla* (Haw.) Haw. was found from Mississippi to North Carolina with 85 populations, which were mostly coastline except sandy communities in Mississippi (all wild). *Opuntia stricta* (Haw.) Haw. was found from Mississippi to South Carolina along with 100 populations along the coasts (mostly wild). A few wild populations of *O. aff. grandiflora* Engelm. were found in Alabama and Mississippi. The most common species cultivated in the Southeastern United States was *O. engelmannii* Salm-Dyck ex Engelm., for which there were 839 dataforms in the database. Other species cultivated in the Southeastern United States included *O. acciculata* Griffiths, *O. ficus-indica* (L.) P. Miller, and *O. undulata* Griffiths. Data collection is expected to continue in 2007 with emphasis on strategic southeast states and additional sentinel sites. With ongoing cactus moth eradication and other efforts by the USDA-APHIS in Florida and S. Alabama, more information is needed on cactus moth and host populations in those areas. There is also a continuing need for sentinel sites across the southern United States.